

KINGSTON RECOVERY PROGRAM MANAGEMENT SITE

MONTHLY REPORT

May, 2013

Aerial Image of Kingston Ash Slide (05/01/2013)



0 1,000 2,000 3,000 4,000
Feet

Date of imagery: 05/01/2013

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Tennessee Valley Authority
Realty, GIS & Land Records

KINGSTON RECOVERY PROGRAM MANAGEMENT SITE

MONTHLY REPORT

May, 2013

SAFETY

- Thirty-eight individuals attended site-specific Health, Safety and Environment (HSE) orientations during May, 2013 – 2,370 project-to-date. Twenty-one site-specific refresher courses were conducted during the month of May, 2013 - 456 project-to-date.
- Fifty-seven (57) Safety Observation Reports (SORs) were submitted during May, 2013 – 3,961 year-to-date; 3,961 are closed.
- Presented at the TVA site leadership offsite meeting the strategy to complete the project incident-free.
- Developed information to be used / reviewed in the site “Town Hall” meetings with site workers.

INFRASTRUCTURE / ASH MANAGEMENT

- Efforts for site maintenance, dust control, and Hazardous Waste Operations and Emergency Response (HAZWOPER) control continued.
- Continued recovering cenospheres from the onsite ponds.
- Continued borrow excavation.
- Started Kingston Entrance Restoration project.

ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL

- Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the Main Ash Pond effluent (Agri-Drain outlet) averaged 84.3 mg/L and the Stilling Pond effluent averaged 13.3 mg/L for May, 2013.
- The Ash Pond effluent polymer addition (Agri-Drain location) rates were adjusted based on TSS levels during May, 2013. Ascetic acid was applied to control pH in the Stilling Pond.
- The plant began May, 2013 with 6 units online and ended with 8 units operating.
- Bottom ash was dipped during May, 2013 from the Sluice Trench.

PLANT ASH STORAGE / INTERIM ASH STORAGE AREA (BALLFIELD)

- Trans-Ash placed and compacted dry flyash during May, 2013.
- Geosyntec provided Quality Control and Assurance during May, 2013 for the Interim Ash Staging Area (IASA).
- The Kingston Fossil Plant (KIF) operated from 5 to 8 units during May, 2013 - average of 6.52.

CENOSPHERE CONTROL ACTIVITIES

- Daily pond inspections were performed for all ponds.
- Collection of cenospheres by hydro-vacuum truck was not carried out in May, 2013.

ROUTINE MONITORING

Surface Water Sampling

- Continued routine surface water monitoring. Monthly Stilling Pond results received to-date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit.
- There were rainfall events on May 4 and 18, 2013 that triggered storm flow sampling in Swan Pond Embayment.
- Automated monitoring stations (Hydrolabs) are online continuously monitoring surface water conditions at 6 locations; one in the Middle Embayment Settling Basin, two in the Clean Water Ditch (east and west), one at the Ash Pond Agri-Drains, and two in the Stilling Pond.
- Continued daily TSS monitoring at the Ash Pond Agri-Drains and Stilling Pond.

Air Sampling

- All air monitoring results for May, 2013 from the PM2.5 TVA air samplers were below the current Ambient Air Monitoring Plan (AAMP) action levels.

Biota Sampling

- Continued monitoring bird boxes for 2013 tree swallow season. Completed collection of tree swallow eggs.
- Completed Spring Fish Bioaccumulation and Health studies in support of Long Term Monitoring (LTM) Program.
- Initiated Benthic Invertebrate sampling of Mayfly nymph in support of LTM.

Data Management

- Provided monthly surface water and air monitoring results to the U.S. Environmental Protection Agency (EPA).

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of Dredge Cell and Ash Stacking operations.
- Continued Geoprobe delineation and confirmation sampling support for Middle Embayment ash removal.
- Continued spoils runoff sampling from the two tanks of spoils material associated with the Perimeter Wall Stabilization (PWS) project.
- Completed another round of disposal of biota sample retains.
- Performed evaluation of Dredge Cell closure soil test plots at Gupton Farm. Prepared plans and work authorization for Geoprobe borings planned at Gupton Farm in early June.

DREDGE CELL

- Ash stacking continued next to Segment 1 when weather permitted. Heavy rains interrupted stacking several times and created washouts needing repair.
- A test plot was conducted to evaluate methods of subgrade preparation for flexible membrane liner (FML) placement. Completed the final grading in Cap Area I prior to FML placement.
- Continued construction of the Perimeter Berm along Segment 7, including sand blanket and clayey borrow soil placement, as weather permitted.
- Continued drying of spoils in the Relic Area of the Dredge Cell and removing Relic ash to the Lateral Expansion.
- Geo-Con continued PWS construction on Segments 5 and 6.
- Griffin continued operating the deep and shallow well points for dewatering of both Segments 6 and 5.
- TVA transmitted the 90% Removal Design Package for the South Dredge Cell (and Ash Pond) Closure.

LATERAL EXPANSION

- Ash stacking continued in the Lateral Expansion as weather permitted.
- S&ME continued mitigation coring (secondary round of coring) in Segment 2 and continued coring in Segments 3 and 4.
- Geo-Con continued predrilling and jet grouting for defect repairs in Segment 2.

RIVER SYSTEM RESTORATION

- Addendum Report to the Groundwater Flow Model from Geosyntec was transmitted to the agencies for review on May 12, 2013.
- LTM Plan finalized on May 30, 2013.

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Continued design efforts for the revisions to the boat ramp in the Lakeshore Recreation area.
- Continued design efforts for the recreation and restoration features for the Berkshire and Borrow areas.
- Completed trail construction on the western side of Lakeshore.
- Began trail construction on the eastern side of Lakeshore.
- Began fishing pier construction.
- Began landscape installation.
- Continued design efforts for the Berkshire Ballfield design. Met with Roane County on May 23, 2013 to review conceptual design.

MIDDLE EMBAYMENT

- Ash removal from the Middle Embayment was carried out during May, 2013 and was 90% complete at month's end.
- Ash removal along the Clean Water Ditch near completion. This work required removal and replacement of the Clean Water Ditch Berm which was also near completion by month's end.
- Weekly Middle Embayment status reports were submitted.
- Rock from T-2 sediment pond was recovered for use in other features and disposal in the Ash Pond area.

ASH POND

- Ash Pond area was used for stacking when other areas were not available
- Ash Pond area received rock from excavation of T-2 dike in the Middle Embayment.

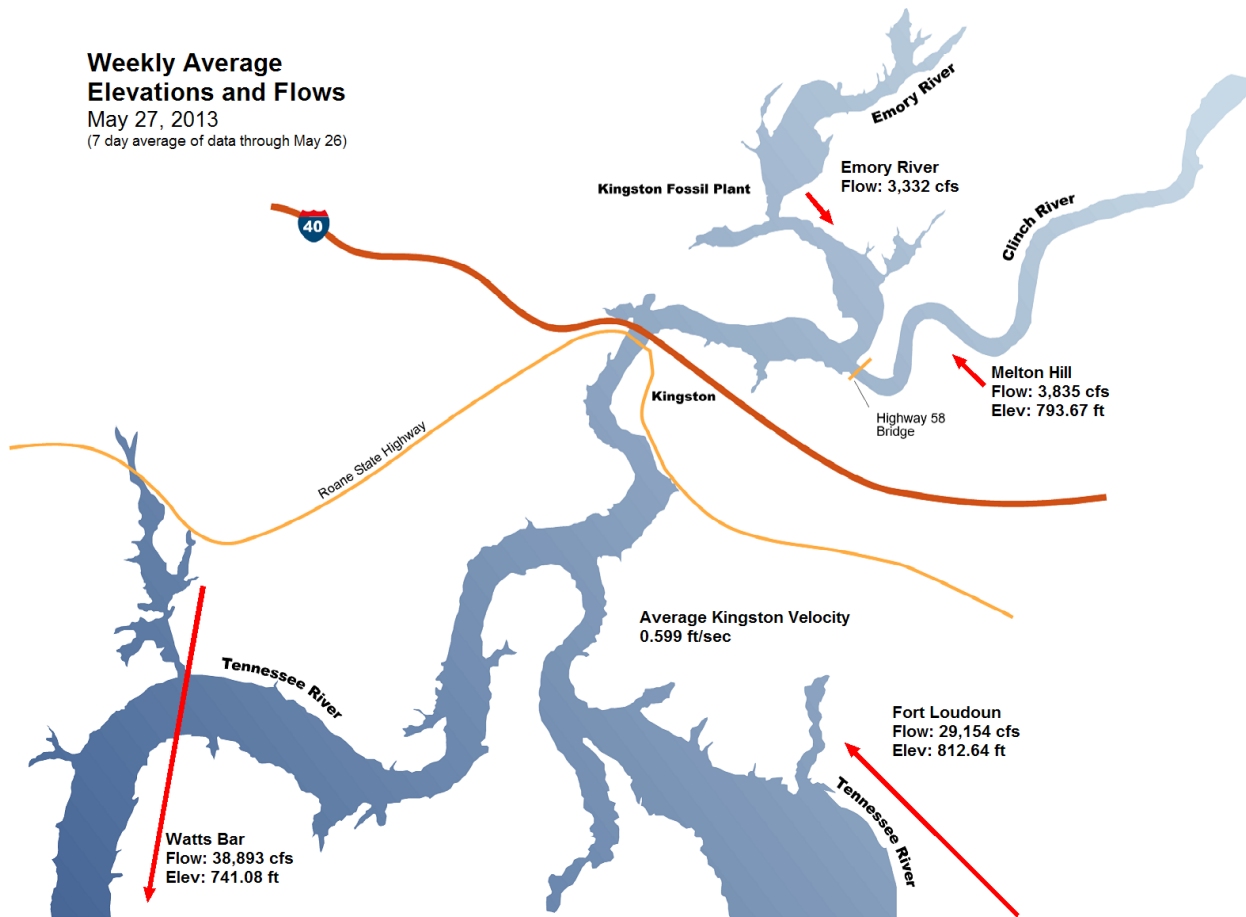
OUTREACH / COMMUNICATIONS

- Added weekly area resident updates to Kingston Ash Recovery (KRP) website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Conducted the first of regular public tours of the project May 23, 2013.
- Met with CAG to provide an update on the project.
- Updated administrative records with work plans and relevant documents.
- Continued to respond to calls from residents.
- Updated site bulletin boards.
- Worked on the Public Meeting scheduled for Thursday, May 30, 2013 at the Roane County High School Auditorium to discuss a site update and the LTM Plan.

RIVER OPERATIONS

Weekly Average Elevations and Flows

May 27, 2013
(7 day average of data through May 26)



**PERIMETER WALL STABILIZATION
SEGMENTS 1, 2, 7, AND 8
CONSTRUCTION PROGRESS
AS OF JUNE 8, 2013**

LEGEND

- CONSTRUCTION COMPLETED
- MITIGATION
- EPA APPROVED

NOTE: 1 OF 8 SEGMENT 7 MITIGATION COMPLETED BY FEBRUARY 2, 2013.

KEY MAP

SCALE: 0' 100' 200'

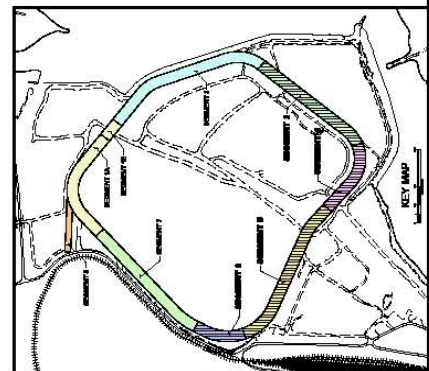
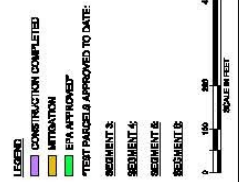
PWS - Construction and Assessment Status

	PWS CONSTRUCTION		QC CONSTRUCTION		DEFECT MITIGATION		QC DEFECT MITIGATION		COLD JOINT MITIGATION		APPROVAL/CONCURRENCE		COMMENTS	
	Installed	Cured	Assessed	Delivered	Pre-Drilled	Jet Grouted	Cured	Assessed	Pre-Drilled	Jet Grouted	Assessed	TVA		EPA
SEGMENT 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	19-Oct-2012
SEGMENT 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	22-Feb-2013
SEGMENT 7	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	23-Mar-2013
SEGMENT 8	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	20-May-2013

**PERIMETER WALL STABILIZATION
SEGMENTS 3, 4, 5, AND 6
CONSTRUCTION PROGRESS
AS OF JUNE 8, 2013**

PWS - Construction and Assessment Status

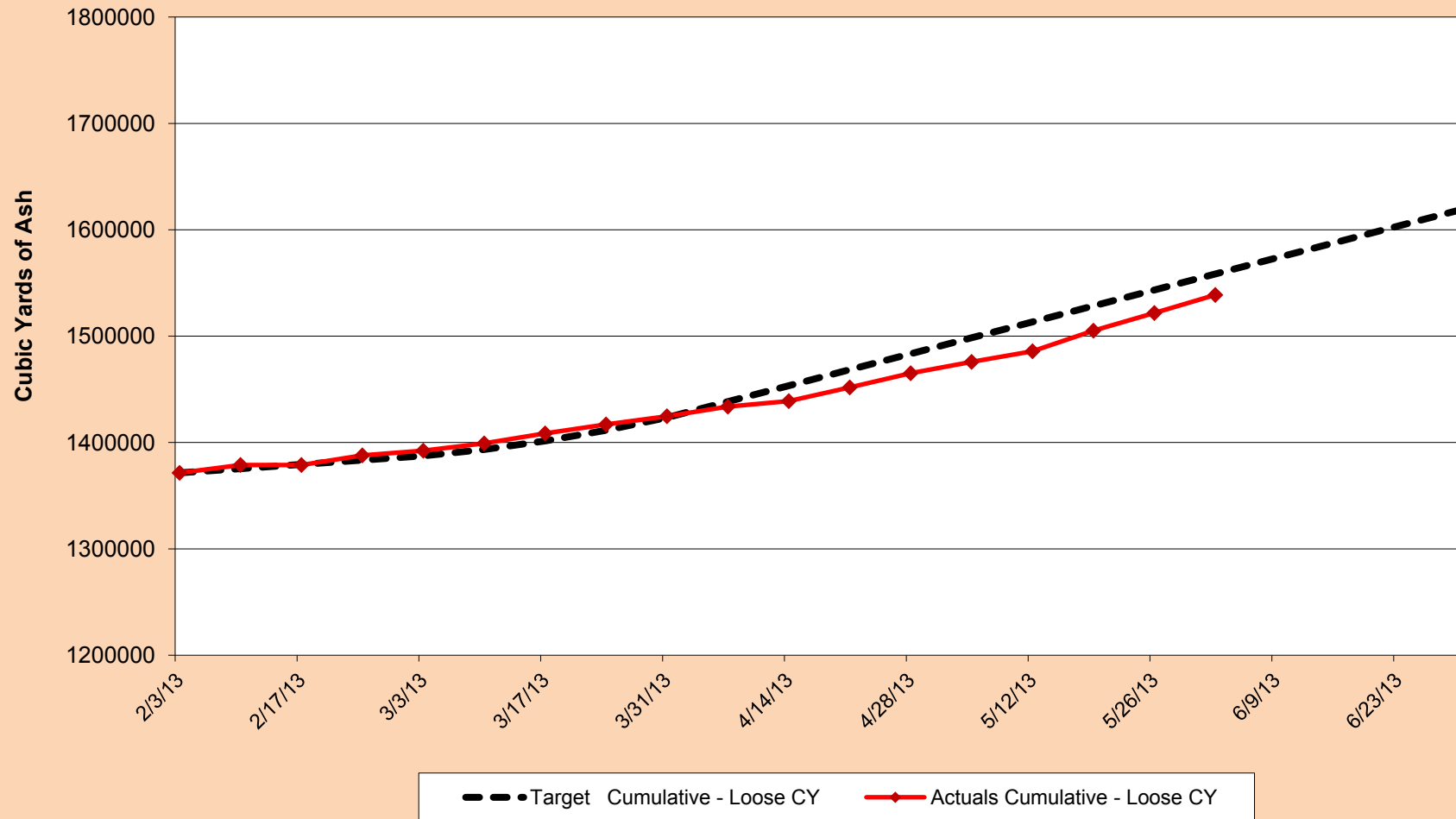
	PWS CONSTRUCTION			QC CONSTRUCTION				DEFECT MITIGATION			QC DEFECT MITIGATION			COLD JOINT MITIGATION			APPROVAL/ CONCURRENCE		COMMENTS
	Installed	Cured		Cored	Assessed	Delicatated	Field Addendum	Pre-Drilled	Jet Grouted	Cored	Assessed	Pre-Drilled	Jet Grouted	Cored	Assessed	TVA	EPA		
SEGMENT 4	100%	100%		42%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10-Jul-2013	
SEGMENT 3	100%	100%		42%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	06-Aug-2013	
SEGMENT 6	73%	0%		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19-Dec-2013	
SEGMENT 5	41%	0%		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21-Jan-2014	



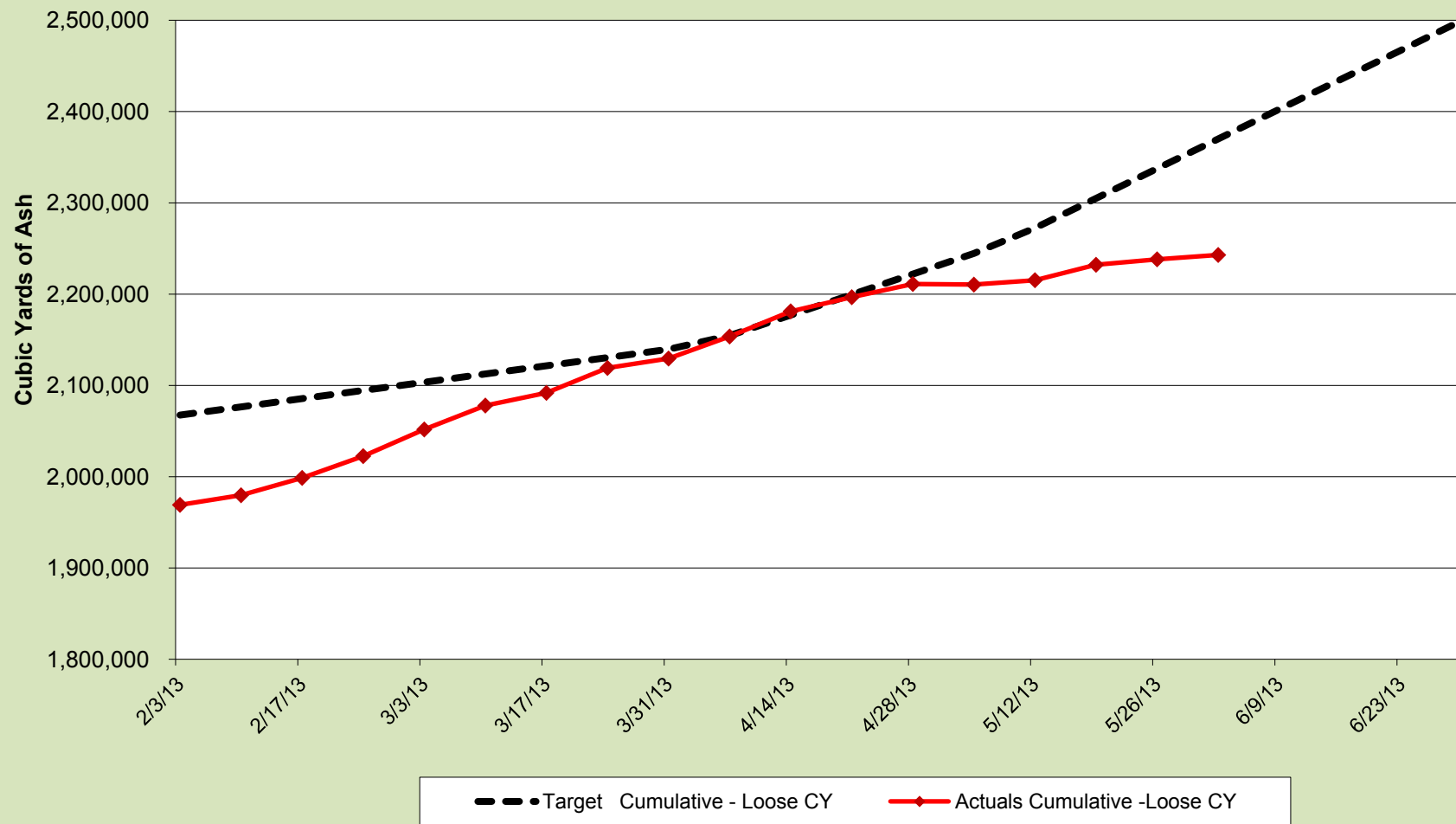
Kingston Recovery Program Management Site - May, 2013 - Field Report				
Safety			Monthly Total	FY – Cumulative Total
Near Misses			0	0
First Aid Incidents			0	6
Recordable Incidents			0	1
Recordable Lost Time Incidents			0	0
Environmental	Matrix	Samples	Analyses	Results
Organization - TVA	Surface / Utility Water	5,847	48,734	244,263
Organization - TVA	Groundwater (Spring & Well)	266	2,830	13,769
Organization - TVA	Ash	769	1,299	9,584
Organization - TVA	Soil / Sediment	3,848	6,090	36,547
Organization - TVA	Biota	5,549	13,499	141,007
Work Description			Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation				
Total Removed from Middle Embayment			-	1,016,864
Total Removed from North Embayment			-	1,010,322
Total Removed from Settling Basins / Dike 2			46,544	137,864
Total Removed from Swan Pond Road Corridor			780	2,402
Excavated Total			47,324	2,167,451
Work Description			Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement				
Total Placed in Dredge Cell			39,013	1,539,131
Total Placed in Lateral Expansion			68,039	742,384
Total Placed in Ash Pond			6,864	426,045
Total Placed in Stilling Pond			-	17,641
Placed Total			113,916	2,707,559
Work Description			Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling				
Total Removed from Lateral Expansion			-	54,446
Total Removed from Dredge Cell			90,955	1,103,618
Total Removed from Ballfield			19,422	515,681
Removed from Storage Total			110,377	1,673,745
Net Removed to(from) Ballfield Storage			(11,202)	(162,276)
Net Removed to(from) Relic			(33,548)	(490,167)

For period ending May 31, 2013.

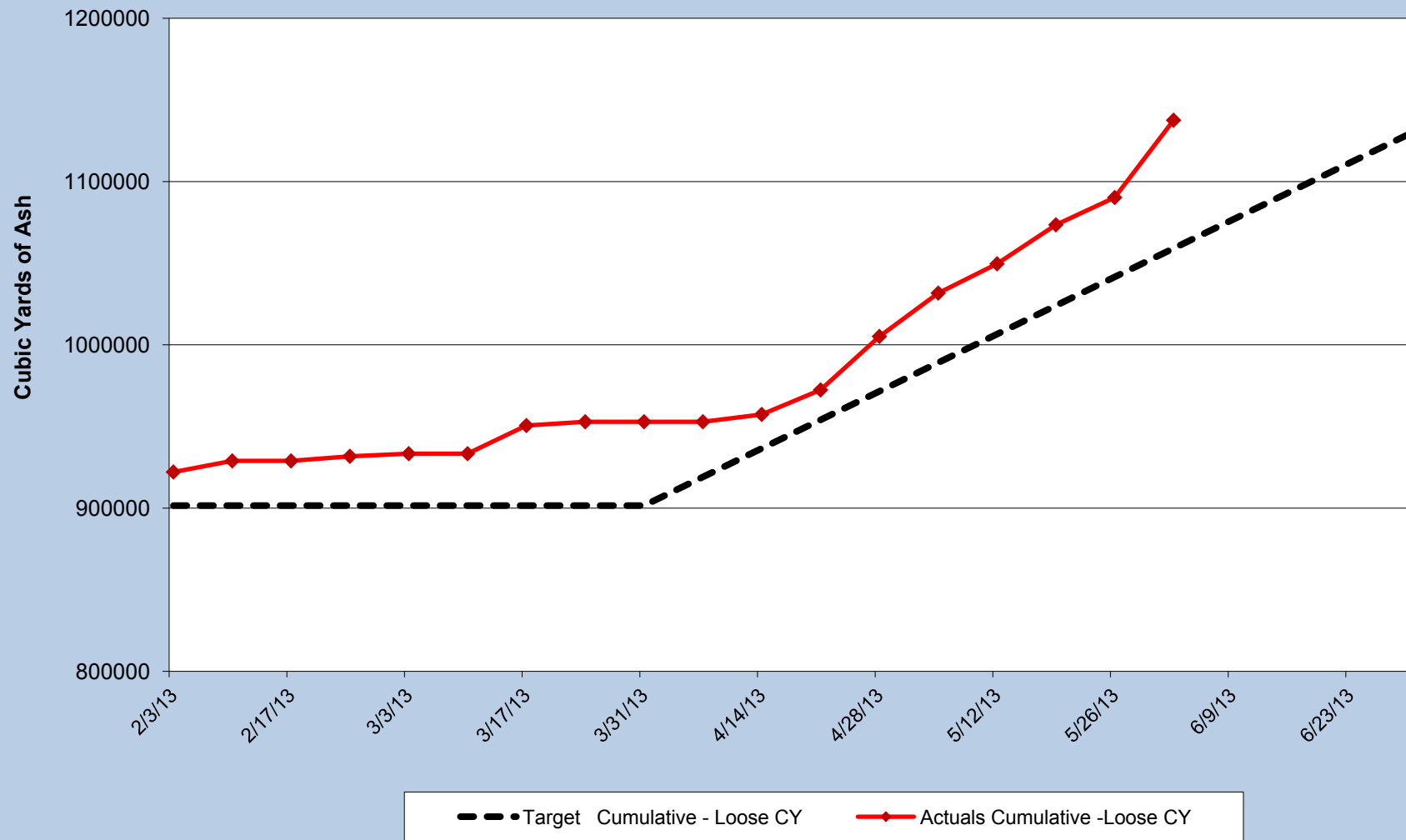
**Ash Excavation from Middle Embayment
Weekly as of May 31, 2013**



Ash Stacking in Dredge Cell Weekly as of May 31, 2013



Ash Stacking in Lateral Expansion Weekly as of May 31, 2013



**Perimeter Wall Stabilization Segment 5 & 6
Weekly as of May 31, 2013**

